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## ABSTRACT

The Michigan Educational Resource Information Center (MERIC) was established in order to serve the needs of the state's educators by facilitating general access to resources through the existing state education agency (SEA). MERIC increased the variety and quantity of educational resources available in Michigan, broadened access to these resources, and coordinated the continuing improvement of the SEA's dissemination services. Located in the State Library, MERIC developed procedures for drawing on the State Library's resources, subject-specific programs within the department, national databases, and resources in intermediate districts throughout Michigan. The agency's data processing center developed and maintained a search and retrieval system patterned after ERIC with off-line, searchable program, product, and human resource files. MERIC also established a network of eight key communicators at intermediate school districts to assist in dissemination and link local district educators to the system, with the aid of a 23-station telecopier network. Its primary users were information resource providers at the state, regional, and intermediate district levels. An appendix lists activities and accomplishments. (Author/TE)

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FINAL REPORT

Project No. 6-0025  
Grant No. NIE-G-76-0065

Michigan Dissemination Capacity Building Project

Philip H. Hawkins

Project Director

July 15, 1983

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OFFICE OF PLANNING

MICHIGAN DEPARTMENT OF EDUCATION

LANSING, MICHIGAN

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## ABSTRACT

### Michigan Dissemination Capacity Building Project

The Michigan Dissemination Capacity Building Project was funded by the National Institute of Education for five years ending in fiscal year 1981 to develop and institutionalize an educational information dissemination system in the state education agency. The Michigan Educational Resource Information Center was established with the operating premise that the state education agency could best serve the information needs of the state's educators by facilitating general access to resources through existing organizational units. MERIC was also intended to assist proactive state agency, regional, and intermediate dissemination services rather than take on the change agent role itself. MERIC increased the variety and quantity of educational resources available to school people in Michigan, broadened access to these resources, and coordinated the continuing improvement of the state education agency's dissemination services.

MERIC'S operation was located in the State Library, a division of the state education agency, and its grant administered by the planning unit within the Superintendent's Office. MERIC developed procedures for drawing on the State Library's resources, the resources of subject-specific programs within the Department, national data bases, and resources in intermediate districts throughout Michigan. The agency's data processing center developed and maintained a search and retrieval system patterned after ERIC with off-line, searchable program, product, and human resource files. MERIC established a network of eight key communicators with statewide coverage at intermediate school districts to assist in dissemination, link local districts educators to MERIC, and advise on dissemination strategies and activities. MERIC communicated via telephone and a twenty-three station telecopier network located in the State Library and the State's Regional Educational Media Centers. MERIC'S primary users were information resource providers at state, regional, and intermediate district levels.

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## Background

This section describes the organizational and information service contexts in the Michigan Department of Education prior to the initiation of the Dissemination Capacity Building Project. Two factors are described: the status of dissemination activities in the Department in 1975; and the role of the State Library, which was the operational location of the project. The Background section concludes with a discussion of the Department's school improvement effort and the roles identified in 1975 for the capacity building project and for a research and development utilization project in this effort.

## Dissemination Status

In 1975, the Department's dissemination activities were both proactive and responsive. Requests for information and technical assistance moved to departmental staff through a number of channels and responses moved to clients through several, although not always the same, channels. One input channel was the Superintendent's hot-line which administrative staff in local school districts used to contact the Department to obtain information and assistance related to general or specific operating needs. Another channel was the departmental information telephone number through which requests for information and assistance of either a general or specific nature were transferred to program staff. A third general channel was telephone calls or mail directed to the Office of Public Affairs which responded with available printed materials produced by departmental programs. The Public Affairs Office also referred requests for materials to program staff, the State Library, or the State Government Materials Distribution Center. In addition, letters, and telephone calls which requested assistance or information, wherever received in the Department, were

routed to the program or office which was responsible for the area of concern. The Department, through this internal "switchboard" operation, had the capacity to link local educators who requested information or assistance directly from the Department to departmental sources of these resources.

This mechanism worked well when six criteria were met:

1. The client contacted the Department directly;
2. The request clearly defined the type of information or assistance needed;
3. The requested information or assistance matched departmental organizational units;
4. The requested information or assistance could be provided or obtained by departmental staff;
5. The amount of staff time available to respond to requests was sufficient; and
6. Follow-up with the client to assist in utilizing the information or assistance was not necessary--if the request matched a current technical assistance effort of the responding unit, then follow-up was possible assuming staff availability.

In contrast to the "switchboard" were the specialized dissemination networks which linked users of specific types of information through local specialists to regional resource agents and departmental program specialists. Agents either responded to requests directly and provided follow-up interpretation and utilization or referred the requests to other potential sources of information or assistance. Such sources included local and intermediate school district information services or specialist staffs, universities, the Department, and national organizations and centers.

Examples of these specialized dissemination networks were: the four (of the projected eight) regional dissemination facilitators for the adoption of Michigan validated alternative practices, the forty-nine Career Education Planning Districts, the twenty-two Special Education Curriculum Resource Centers and thirty-eight local and intermediate districts' special education centers, the twenty-two Regional Educational Media Centers, the Accountability Consortium consisting of over twenty-five local school districts, the twenty individuals who constituted the Bilingual Education Technical Assistance Network coordinated through the Department's Bilingual Education Office, and the State Library's twenty-four regional libraries.

A problem which faced all of these specialized dissemination networks except the Library's was the slow rate of communication among the units within the individual networks. This led to operational isolation, especially in the rural areas of the state. The exception was the Library network which used leased lines and telecopier units. A second problem was the lack of an interconnect among the several networks which would make it possible to direct requests for information or assistance unavailable through one network to another through which it was available. A third problem was that only the Regional Educational Media Center network had access to generalized information and assistance. However, this access was limited in most cases to prepackaged media.

The Department's internal "switchboard" and the specialized dissemination networks shared a common shortcoming. Neither had the capacity to integrate information from several knowledge areas to "tailor" responses to the local educator. While the State Library performed this service for staff of the Department and the legislative, judicial, and other executive branch depart-

ments of state government, the Library did not have the staff capacity to meet similar needs of educational decisionmakers and practitioners. Neither did the linkage system connect all local users through a general dissemination network either to appropriate specialized networks or to the State Library.

In summary, the Department's dissemination activities in 1975 addressed the specialized information and technical assistance needs of local educators and the general information needs of state government staff.

#### The State Library

Before the 1963 Constitutional Convention, which reorganized state government, the Library was an independent body governed by the State Board for Libraries. In 1963 the Library was transferred to the Department of Education and the powers and duties of the Library Board were vested in the State Board of Education. Its organizational location in the Department of Education brought to the Library a potential focus on educators as a special clientele. Its regular clientele were the public libraries of the state which it administered according to state law. Its administrative relationship with educational programs in the Department provided a potential pool of information and expertise for staff to draw on in response to Library user requests. The Library's school media program was established to administer programs that put educational materials and equipment in local and intermediate school districts. It focused Library attention on local school districts, intermediate school districts, and Regional Educational Media Centers as new clients added to the existing public library constituency. The staff of the Library were, however, partitioned into special purpose units each with designated responsibilities. While work could be shared to distribute peaks and valleys, there were no staff available to take on new, additional responsibilities.

Within the Library the operating units focused their attention primarily on the administration and support of the State's public libraries and the State Law Library which served the Supreme Court and Attorney General, the Legislature and the Executive. The Library defined its role as library and government administration and service. Its efforts on behalf of education primarily focused on administering an inter-library loan and access system for universities' libraries. It maintained a juvenile book collection and the depository of elementary and secondary texts approved for sale in Michigan. Within its general reference collection were the complete series of ERIC publications, RIE, and CIJE. The Library was also a regional repository for federal documents and the official repository for state documents.

When Library staff responded to a request, their typical method was to search for specifically identified materials and to assemble a topical guide to reference materials. Local school districts' staffs could request educational information from their Regional Educational Media Center and intermediate school district. If the queried unit could not respond to the request, the Regional Educational Media Center or intermediate school district could pass along the request to the State Library by phone or letter. The information desk in the Library would direct the request to inter-library loan, general reference, or school media program. If the request could obviously be answered by a departmental program, a written request would be sent there by inter-department mail and a telephone request would be transferred.

To increase its level of service to Regional Educational Media Centers, the school media program began to make extensive use of telecopying equipment. Originally purchased for the Library's inter-library loan activities, the telecopiers were viewed as an efficient mechanism for exchanging information

with the Regional Educational Media Centers. Through the Regional Educational Media Centers, the media program began to extend to educators the Library functions of: locating and loaning named materials, locating, assembling and sending out packages of books, vertical file materials, and references in response to Regional Educational Media Center and intermediate school district subject matter requests, and producing bibliographies and bibliographic information on demand. The media program faced out toward the schools and educational agencies and drew on the Library's resources in responding to requests. It referred questions to other programs within the Department if the Library's resources, including manual ERIC searches, were inappropriate or inadequate. The staff assigned to the media program allocated their time first to grant administration, second to media services, and then to responding to information requests. By 1975 the media program provided extensive library services through the Regional Educational Media Centers and intermediate school districts to local educators as well as to the Regional Educational Media Centers and intermediate school districts themselves. The perspective was the provision of traditional library services to educators. Original funding sources for the media program activities were NDEA III, ESEA II, and, later, ESEA IVB.

A separate education focus of the State Library was the Library for the Blind and Physically Handicapped. Funded under federal auspices, this unit provided materials, equipment, and other reader services to a specific, continuing user group.

As one of thirteen divisions of the Department, the State Library identified its users as agencies, organizations, and individuals who requested the kinds of help a traditional library provided as well as those for whom it, as

an administrative and regulatory unit of state government, had responsibility.

#### School Improvement and Capacity Building

In 1972 the Superintendent of Public Instruction, John W. Porter, had begun to emphasize a school improvement process based on a problem-solving model he called "educational accountability". The Department's director of planning chaired a series of six regional workshops in 1974 to present the Superintendent's plan to the state's elementary and secondary school, intermediate district, and Regional Media Center staffs and to assess generally the kinds of assistance school people would need to implement the accountability model. Besides issues of local versus state control of curriculum and standards and the financing of improvement efforts, local educators asked the Department for support through access to research and other educational information including programs, products, and people they could call on for technical assistance and training.

In 1975 the Department's planning director assembled a departmental committee on dissemination to determine the status of the Department's dissemination activities and recommend departmental dissemination policies. The dissemination committee submitted a proposal to the National Institute of Education for funding of a state dissemination capacity building project. The project was intended to support local school districts' improvement efforts by combining training in problem-solving, assistance in identifying and interpreting potentially useful educational materials and projects, and the development of a comprehensive resource base which local districts could draw on to meet needs in a wide variety of areas. The project would draw on its own staff and staff of other Department programs to train trainers of local district

staff. The project staff would be proactive in both problem-solving and information identification. This project would have begun to implement the Superintendent's accountability model throughout the state. The National Institute of Education rejected the proposal and in the debriefing criticized the overemphasis on intervention and weakness in resource development.

The National Institute of Education did award the Department a special purpose grant to develop a comprehensive dissemination plan for the agency. The dissemination committee dealt with the school improvement issue by analyzing the kinds of support the Department's different programs might provide. The committee determined that active involvement with school district personnel should be undertaken by program staff responsible for the targeted subject area, that the Library should provide these programs with the information services they needed to work successfully with schools, and that the Department should establish a network to facilitate and coordinate the flow of information requests from and information responses to local school districts. These concepts were embodied in the Department's 1976 proposal for a state dissemination capacity building proposal. This proposal was funded in 1976 but the project did not begin operation until October, 1977 when the Legislature reappropriated the federal funds into the Department's regular operating appropriation for the fiscal year beginning October 1, 1977 and ending September 30, 1978.

During the period in 1975 when the dissemination committee was working on the planning activities supported by the special purpose grant and developing the 1976 capacity building submission, it reviewed the National Institute of Education request for proposals regarding the utilization of the results of research and development by local school districts. This RFP dealt with

research and development products in basic skills and career education. The previous year, 1974, Michigan's Legislature had passed a law requiring schools to plan and implement career education programming. The RDU project offered the Department an opportunity to assist local schools to meet the career education planning and implementation demands of the legislation, an opportunity to refine and test the problem-solving aspects of the Department's accountability model, and an opportunity to train staff in the state's Career Education Planning Districts to facilitate local districts' efforts and link them to research and development resources held in the Department's career education office and Library. the Department's career education coordinator had been in contact with the National Institute of Education and reported that the RDU project would fit with the Department's career education efforts. The dissemination committee recommended that an RDU proposal be prepared and submitted to the National Institute of Education.

In the spring of 1976, the Department was awarded an RDU contract and in the late summer was also awarded a state dissemination capacity building grant. These two projects gave the Department the ability to develop and test a problem-solving procedure and a resource support system for local and intermediate school districts and Regional Educational Media Centers. The intent of the original, rejected, dissemination capacity building proposal could be developed and tested. The Department could increase its school improvement efforts by facilitating local problem-solving and by increasing its capacity to support these efforts with information resources.

### Pre and Post Project Dissemination Capacity

This section has two parts. The first compares the status of the Department's dissemination capacity in terms of information resources, linkage, and leadership prior to initiation of the project in the fall of 1977 and subsequent to the project's last National Institute of Education funded project year in the fall of 1982. This section differs from the previous Background section by dealing with the three categories of capacity rather than the organizational context. The second part describes the three categories of capacity in more detail and deals with them from an historical perspective.

#### Summary Comparison

The condition of the Department's dissemination activities prior to year I (September, 1978 through August, 1979) and subsequent to year V (September, 1981 through August, 1982) is outlined in Table I. In general, the Department lacked formal coordination procedures for educational dissemination, lacked a physical location identifiable by Department staff and practitioners as a center for the dissemination of information to educators, lacked shared definitions of dissemination and knowledge resources, and lacked the means and methods to access and disseminate information resources rapidly. The project's major tasks were to develop an inventory of available resources, to develop a network of information agents in the Department, in Regional Educational Media Centers, and to establish a viable and credible operating dissemination unit for the Department. These three tasks are addressed in Table I as information resources, linkage, and leadership.

#### Information Resources

The project's information resources which are physically located in or

TABLE I

## PRE AND POST PROJECT COMPARISON

BEFORE FY 1977-78

AFTER FY 1981-82

INFORMATION RESOURCES

State Library resources available  
but not readily accessible to schools

Manual search of ERIC, CIJE

Manual search of NDN product files

Manual search of ESEA IVC "Programs  
that Work"

No resource bank of educators in  
Michigan available to assist in  
school improvement practices

Manual search of curricular and  
program materials on scattered  
State Library shelves

Materials produced and/or held by  
programs, e.g., special education,  
career education, sex equity, not  
generally accessible

No access to national data base

No procedure for gaining access for  
educators to information resources  
held by other agencies of state  
government

Other state agencies have no proce-  
dure for rapid search and retrieval  
of their materials

No educational subject or topic  
bibliographies produced by MDOE  
for educators

All State Library collections accessi-  
ble to schools through MERIC

On-line search of ERIC through two  
terminals dedicated to schools

Off-line search of NDN products through  
computerized Michigan Education  
Resources data base

Off-line search of "Programs that Work"  
in product file through computerized  
Michigan Educational Resources data  
base

Off-line search of Human Resource  
through computerized Michigan Educa-  
tional Resources data base

Off-line search of Program File through  
computerized Michigan Educational  
Resources data base

Off-line search of specialty area  
materials through computerized  
Michigan Education Resources data  
base

On-line access to national data bases  
through DIALOG, ORBIT, BRS, NYT

Inter-agency access procedures  
established for information resources

MERIC trains other agency staff to  
abstract materials in MER format and  
enter in MER data base. Access to  
all abstract materials by all MERIC  
clients established.

Routine production and updating of  
bibliographies in areas such as sex  
equity, migrant/bilingual education,  
vocational rehabilitation, gifted  
and talented.

## PRE AND POST PROJECT COMPARISON

BEFORE FY 1977-78

AFTER FY 1981-82

### INFORMATION RESOURCES (continued)

Special Education Learning Materials Resource Centers lack access to national data bases and have no central information resource repository.

MERIC disseminates special education materials to SELMCs and operates on-line search of national special education data base.

### LINKAGE

No single assistance contact for educators regarding access to MDOE information resources

MERIC serves as clearinghouse to put educators in touch with MDOE staff

Telecopier networks between Michigan's 22 Regional Educational Media Centers CREMCs and State Library used for bibliographic update and requests for specific titles.

MERIC uses telecopier network for receiving general and specific resource requests and as hot line for advisories and notices.

No common calendar of regional and national meetings of professional interest to Michigan educators

MERIC produces monthly educational event calendar and distributes to MDOE staff, other state agencies' staff, REMC, intermediate school district (ISD), and local school district staff.

No consistent linkage activity between subject matter specialists in intermediate school districts and MDOE programs in other subject areas.

MERIC periodically distributes cross-program resources information to ISD clients and directs resource requests to appropriate specialty area.

Each MDOE program responds to occasional requests for topical information and printed materials from own resources.

MDOE programs, such as sex equity, desegregation, Indian education, special education, career education, gifted and talented, nutrition, bilingual migrant education, and professional development send requests for information to MERIC for response with MER and other data base searches, manual searches of State Library resources, bibliographic materials, and printed materials

## PRE AND POST PROJECT COMPARISON

BEFORE FY 1977-78

AFTER FY 1981-82

### LINKAGE (continued)

No central location for display of curriculum products

MERIC resource center displays products of NDN, Career Education, and Experimental and Demonstration Centers program

Local school districts have no regular communication with each other regarding promising practices

MERIC established local practices file in MER, solicits submissions from local and intermediate districts, trains local educators to abstract projects for inclusion in MER, searches file in response to educators' queries, and puts local educators in touch with one another regarding local promising practices.

MDOE programs have no mechanism for gathering, categorizing, searching, or disseminating information about individuals who can provide training or technical assistance on subject specific topics

MERIC maintains human resource file, assists MDOE programs to acquire agreement of individuals throughout state to participate in subject-specific training and technical assistance activities, and routinely links educators with one another to share expertise and assistance in areas such as sex equity, gifted and talented, math, science, reading, special education, and career education.

Local districts generally limited to own intermediate districts for information resources

MERIC established and maintains communication network among intermediate districts which enables local districts to access information resources in intermediate districts in addition to their own.

### LEADERSHIP

MDOE has no individual or staff dedicated to responding to educators inquiries, to initiating dissemination, and to establishing linkage among MDOE programs, between MDOE programs and educators, and among educators in the schools.

MERIC is recognized as the MDOE's central service for disseminating educational materials on demand and proactively, coordinating communication among the REMCs, and serving as expert consultant to the MDOE on disseminating material, developing information resource banks, use of MER, and training local educators in query negotiations.

PRE AND POST PROJECT COMPARISON

BEFORE FY 1977-78

AFTER FY 1981-82

LEADERSHIP (continued)

MDOE has no defined role in micro-computers applied to instruction.

State agencies do not coordinate with one another in sharing information resources or facilitating educators' access to information resources.

MERIC operates microcomputer resource center with donated and loaned hardware and software to display resources to educators and provide comparative information.

MERIC manager regularly meets with dissemination and research directors and staff of other agencies to maintain flow of resources into MER for statewide accessibility.

accessible through the project's workplace consist of: electronic, on-line data bases available through Dialog, Orbit, The New York Times, and BRS; off-line, electronic data bases specific to Michigan (Michigan Education Resources); paper, microfilm, and microfiche collections of ERIC, RIE, CIJE; the Data-Pro computer report series; bilingual education texts and materials; sex equity materials; the collection of elementary and secondary education texts approved for sale in Michigan; over two hundred separate pieces of educational software; an assortment of microcomputer hardware including Atari, Apple, Commodore Pet, and Zenith; an extensive collection of professional education texts; and a variety of reference works in education.

The project has at its disposal the entire reference collection of the State Library, which includes federal and state repository documents, journal and newspaper collections, vertical files, a computerized catalog of all library holdings in Michigan, and terminal access to OCLC. Through the network the project has established with programs throughout the Department, resources are available in the areas of: Bilingual Education, Global Education, Non-Sexist Education, Food and Nutrition Education, Pre-Primary Education, Gifted and Talented Education, ECIA Chapter 1, ECIA Chapter 2, National Diffusion Network, Career Education, Sex Education, Fine Arts Education, Michigan Rehabilitation Services, Vocational-Technical Education, Special Education, Adult and Continuing Education, Professional Development, Institute for Staff Development, Institutional Education (deaf and blind schools), and Energy Education. Through the inter-library loan network operated by the Library via telecopiers the project has access to the holdings of the libraries of the University of Michigan and Michigan State and to the holdings of the libraries participating in regional cooperatives. Through the OCLC terminal, the project has access to

the holdings of all libraries belonging to that network. Also through the telecopier the project has access to the information resources of the twenty-two Regional Educational Media Centers.

The data presented in Tables II and III show changes in users, shifts in types of project responses and growth and decline in quantity of information resources provided to the project's users. The users of the project's on-line data base searches are presented in Table II. They have been predominately staff in the Department and in other state agencies. The staff in Regional Educational Media Centers, intermediate school districts, and local districts have accounted for approximately one-third of the searches in each of the five project years. The sole exception was year IV when the non-state level requests dipped to sixteen percent.

At the state level, in the first year the State Library was by far the heaviest user contributing forty-three percent of the requests. The remaining staff of the Department requested thirteen percent of the searches and staff in other state agencies requested ten percent of the searches. In the second year of the project, the Library and other Department staff again received fifty-six percent of the searches but the distribution shifted to twenty-nine percent Library staff and twenty-seven percent other Department staff. This distribution remained about the same in project years III, IV, and V. The major shift in the overall distribution was temporary and occurred in year IV in which fifty-six percent of the searches were made at the request of staff in state agencies other than Education. In the other project years, other agencies' requests reached twenty-nine percent twice and were as low as nine percent. In year V, these agencies' requests made up seventeen percent of all requests. This decrease appears to indicate that the year IV high level of usage was

TABLE II  
PROJECT ON-LINE SEARCHES<sup>1</sup>  
(All data bases, all clients)  
Project Years I - V: July - March

|                                                                  | <u>Year I</u> | <u>Year II</u> | <u>Year III</u> | <u>Year IV</u> | <u>Year V</u> | <u>Total</u> |
|------------------------------------------------------------------|---------------|----------------|-----------------|----------------|---------------|--------------|
| Non-Department of Education,<br>State Agencies                   | 40            | 65             | 303             | 577            | 99            | 1084         |
| Department of Education Except<br>State Library Services         | 54            | 192            | 199             | 159            | 159           | 763          |
| State Library Services                                           | 175           | 204            | 223             | 120            | 117           | 839          |
| Regional Education Media Center/<br>Intermediate School District | 81            | 153            | 214             | 92             | 59            | 599          |
| School District Personnel                                        | 55            | 98             | 117             | 75             | 157           | 502          |
|                                                                  | <hr/>         |                |                 |                |               |              |
| Total                                                            | 405           | 712            | 1056            | 1023           | 591           | 3787         |

<sup>1</sup> All data drawn from annual project proposals/reports previously submitted to the National Institute of Education; except Year V data which are first presented here.

particular to the activities of these state agencies in that year rather than to a trend in the use of the project's information resources.

With regard to total searches, Table II indicates that a total of 405 on-line searches were conducted in the first year. This number increased by seventy-six percent to 712 in the second year. The third year was 161 percent above the base year, year I, and forty-eight percent above the second. The fourth year was 153 percent above the base but three percent below the third. The fifth year was forty-six percent above the base year but forty-two percent below the fourth. In terms of the distribution of levels of on-line searches across the project years, the third and second years were nearly even and together made up fifty-five percent of the total on-line searches prepared by project staff. The second and fifth years were also close and made up thirty-four percent of the total. The decline in the fifth year level is attributed to decreases in project staff, the reallocation of the time of the remaining staff, and the return to a more typical level of search requests from staff in other state agencies. Overall, the project responded to information requests with 3787 on-line searches with an average of 757 in each project year.

In addition to the on-line data base searches, the project provided off-line searches of the Michigan Education Resources computerized data base. MER resided in the Department's data processing center and was accessed overnight in batch mode through paper requests which were completed by project staff and entered by data processing center staff. Searches were also provided through manual retrieval of information held by the project, by the Library, and the collections to which the project had access through the telecopier, OCLC, and inter-library loan networks. Table III presents data for off-line and manual searches. The statistics for off-line searches describe the October through

TABLE III

PROJECT OFF-LINE AND MANUAL SEARCHES<sup>1</sup>

Project Years I - V: October - March

|                                     | <u>Year I</u> | <u>Year II</u> | <u>Year III</u> | <u>Year IV</u> | <u>Year V</u> |
|-------------------------------------|---------------|----------------|-----------------|----------------|---------------|
| State Education Agency              | 343           | 53             | 130             | 176            | 21            |
| Regional/ISD                        | N/A           | 26             | 138             | 67             | 5             |
| Local District                      | N/A           | 43             | 178             | 110            | 9             |
| State Agencies Other Than Education | N/A           | 0              | 9               | 7              | 12            |
| Other States                        | N/A           | 0              | 9               | 10             | 1             |
| Institutions and Associations       | N/A           | 0              | 10              | 8              | 4             |
| Colleges and Universities           | N/A           | 0              | 23              | 19             | 1             |
| Libraries                           | N/A           | 0              | 4               | 3              | 1             |
| Individuals                         | N/A           | 0              | 17              | 11             | 11            |
| Total                               | 343           | 122            | 518             | 411            | 65            |

<sup>1</sup>All data drawn from annual project proposals/reports previously submitted to the National Institute of Education; except Year V data which are first presented here.

March period in the second through fifth project years. The statistics shown for the first year reflect usage of a manual search procedure of the files being accumulated for MER. In the first year, MER was being built as a paper system whose format and usage were being tested in order to justify utilization of the Department's data processing facility. The uniformity of format and high level of demand in the first year justified the development of the computerized data base and off-line search procedures. In the first year, 343 search requests were responded to and were all submitted by Department staff. In the second year, 122 off-line and manual searches were conducted. In year III the search level increased by 325 percent to 518. In the fourth year the search level was 237 percent above year II but down twenty-one percent from year III to 411. In year V the search level declined by forty-nine percent from year II and eighty-four percent from year IV to sixty-five.

Anecdotal remarks offered by the project's access and linkage specialist provide insight into the development and operation of the project's computerized Michigan data base. Ms. Edith Jamsen was the project's full-time access and linkage specialist from her hiring in October, 1977. From her perspective, the project was mainly a data base development, maintenance, and search activity. She did not consider its primary function to be an information clearing-house for Department of Education programs or a routing medium for the programs.

As a secondary function, the project routed requests for information about state educational policies, guidelines, rule, regulations, procedures, and calendars from local educators and staff in other state agencies to Education Department staff. Requests were also routed to other state agencies. These were secondary activities to Ms. Jamsen since her time and that of her three

part-time assistants was mainly devoted to data base development, maintenance, searching, and to assisting other programs' dissemination efforts. Ms. Jamsen noted with regard to usage of the three major files in MER, i.e., documents, products, and human resources, the most frequently accessed file was the human resource file. She said that the educational product file was often used in conjunction with the human resource file. The user frequently wished to talk with someone who had had experience with one or more products before personally inspecting them. The document file was least often used.

One unanticipated outcome of developing MER along the lines of ERIC was the difficulty in conducting searches using the ERIC thesaurus. The thesaurus's distinctions among information categories were too fine for MER since it contained thousands rather than tens of thousands of items. ERIC descriptors and identifiers were originally used for MER entries but yielded searches with too few abstracts. Because the search process was conducted off-line, the result of a search would not be known until the next day. Further searches necessitated by a too restrictive initial set of descriptors wasted staff's time and the data center's computer resources. It also delayed responses to users' requests. In year IV, Ms. Jamsen began the development of a thesaurus with more inclusive categories than ERIC. It had descriptors specific to Michigan resources but was also compatible with ERIC. The MER thesaurus was completed in year V and is currently being prepared for printing.

Ms. Jamsen also reported that MER usage took on a predictable pattern of users and applications. Teachers and administrators were the principal users during August and the school year, and graduate students predominated in June and July. October through November and March through April were heavy usage months with requests principally for human resources and product descriptions

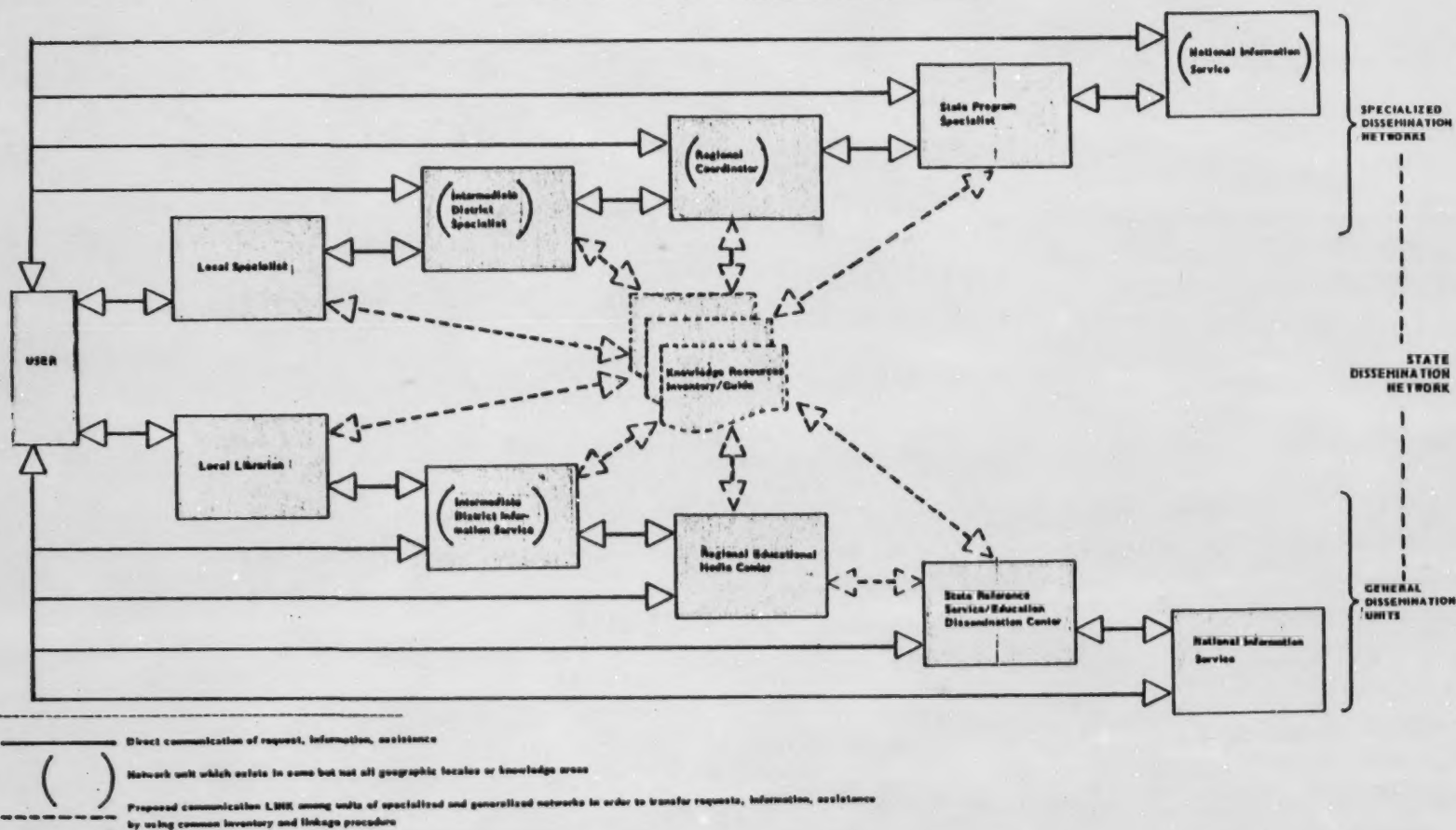
related to curriculum development, teaching methods, and program planning. Requests were also heavy in April and May for human resources to assist with local and intermediate districts' professional development activities.

## Linkage

The Michigan Dissemination Capacity Building Project defined linkage as the connection of people to people and people to information resources. As indicated in the Background section, linkage activities addressed two objectives: (1) to improve the capability of the specialized networks to inter-communicate and thereby make a full range of knowledge resources available to users and (2) to assist users, through specialized networks, to identify and utilize knowledge resources which held promise for solving educational problems which the user had identified and needed to address. The project conceptualized these two objectives as the operational requirements to link the many separate dissemination structures which had proliferated due to separate federal categorical initiatives and state legislated organizational boundaries.

Chart I displays, in schematic form, the concept of specialized dissemination networks, general dissemination units, and inter-network and inter-unit linkage. A specialized dissemination network was defined as a set of units at national, state, regional (within state), intermediate school district, and local district organizational levels that deal with one knowledge resource field exclusively. These units were considered to be a network because they communicated regularly with one another and delivered knowledge resources to teachers, school teachers and administrators, and other educators who were professionally involved in the unit's field. Special Education, Right to Read, and Vocational Education operated such specialized networks. At a minimum, state and local units were involved. Intermediate district, regional, and national units could be involved but were not required by the definition. The project's objective with respect to specialized networks was to gain access to their resources for educators whom these networks did not recognize as profes-

CHART I: EXISTING AND PROPOSED DISSEMINATION STRUCTURE



sionally allied and therefore not members of their user group.

The chart displays such specialized networks as the series of units across the top. From right to left, the units descend in organizational level from national to local. The parentheses indicate units that do not exist for all networks. The solid lines indicate existing direct communication between units.

The general dissemination units constituted a loosely connected network. Unlike the specialized networks, the general network was responsive to requests for all kinds of knowledge resources from all types of educators. This network was made up of the national, general purpose information services such as Dialog, the State Library reference service, Regional Educational Media Centers, intermediate school district information services, and local district media centers and libraries. The general network was considered loosely connected because it has not been established as a network but its units could, through individual initiative, communicate and share resources. These units covered broad areas of knowledge but in less depth than the specialized networks.

The chart portrays these units along the bottom with the national to local units arrayed from right to left. A dashed line between units indicates that a channel of communication had not been established in 1975.

The middle of the chart shows the computerized knowledge resource inventory and access guide which the project intended to develop as the primary, continuing mechanism to link the specialized networks to the general network. Essentially, information requests that could not be met by a unit in a specialized network would be transferred through the guide to a unit in another specialized network or to a unit in the general network. Figuratively, the general network

would be the core of a cylinder whose outer surface was made up of specialized networks reaching from the top of the cylinder to the bottom. The automated guide would be the ether through which information would travel between specialized networks on the surface and between the surface networks and the core general network. The efficiency of the operation would depend upon the speed, comprehensiveness, and accuracy of the guide's content and automation. The system itself would be transparent to the educator-user. The project's primary role would be to maintain the guide and enable the individuals responsible for the units in the general and specialized networks to use the guide. Linkage would be accomplished if the guide worked and if the units made use of it. The units at local, intermediate, regional, and state levels were responsible for working with users to implement and apply the received knowledge resources.

The project dedicated its early efforts to acquiring access to specialized networks for the general user and linking the units across specialized networks. These activities addressed the first objective of inter-network, i.e., people-to-information linkage. The project intended to establish an electronic system to enable units in specialized networks to review the knowledge resources available in other specialized networks and in the general units. The project determined that ongoing training would be necessary to enable individuals in the specialized networks to access the electronic information system. The project would create and update the data files and depend upon the Department's data processing center for software development and hardware support. Once in operation, the system would electronically link information providers throughout the state to a comprehensive and generalized inventory of knowledge resources and their sources. The project anticipated that specialized networks would join this inter-network structure both to improve their access to their

own resources and to improve their capacity to meet the general information needs of the their professional user group.

Person-to-person linkage, which the project identified as a necessary complement to the electronic information system, was intended to motivate use of the system, improve the client's use of knowledge resources received, establish a network of people who shared a common interest in acquiring and utilizing knowledge resources, and provide the project with channels for feedback of information about system operation and effectiveness for course correction and improvement. Person-to-person linkage would exist among the people responsible for the units using the electronic system. Their work with clients would also constitute a person-to-person linkage. The project considered this client-provider linkage to be a critical element in the overall linkage approach and intended to focus a major portion of information agent training on query negotiation and problem solving. The remainder of the training would deal with system utilization.

By 1982, at the completion of the project's funded period, the initial linkage approach had been amended to conform to the operating characteristics of the project's dissemination system. The objective of making electronic access to the computerized inventory, i.e., Michigan Education Resources, at each participating specialized and general dissemination unit location was not achieved. The Department's data processing center had not acquired sufficient telecommunication capacity to support remote terminals throughout the state and had not acquired sufficient processing and memory to support on-line search and retrieval of the MER data bases. As a result, the project accessed MER off-line through paper search instructions prepared by project staff and inputted by data processing center staff. Since project staff were the only individuals

"directly" interrogating the data base, training in MER search procedures for non-project staff was not implemented. The absence of remote access eliminated the person-to-information system linkage between disseminators and MER which had initially been envisioned. Other varieties of person-to-information system linkage were implemented. These included training in procedures for: (1) access and use of the telecopier network between Regional Educational Media Centers and the project; (2) on-line accessing of automated data bases, such as ERIC; and (3) requesting and receiving materials from the project.

The objective of person-to-person linkage which would draw the individuals responsible for specialized and general dissemination units together into a single network and establish inter-network communication was not realized in the manner the project had anticipated. Without remote access and the capacity to search through other networks' data bases, the basis for communication, i.e., the interest in directly securing a knowledge resource located in another specialized dissemination unit, did not exist. All queries were channeled to the project via telephone, telecopier, or letter. The project searched the data bases and sent citations, abstracts, and other materials to the unit that had initiated the request. That unit would then turn the material over to the user. The user might be instructed to contact a specialized dissemination unit such as a Special Education Learning Material Resource Center, but this "directed" contact was sufficiently different from the spontaneous communication and networking the project anticipated that person-to-person inter-network linkage was considered not to have been achieved, even though person-to-information system inter-network linkage did occur.

The third linkage element, i.e., user-provider, was treated differently from initially conceptualized. The original idea was based in the change agent

literature and included the project staff as trainers of specialized and general dissemination unit staff who would work with their clients to identify educational information needs, acquire knowledge resources, and apply the resources constructively. The project staff were not intended to serve in the change agent role. Rather, they were to facilitate others' assumption of it. This change agent training, called "information agent training" by project staff, was to have been carried out as part of the overall information system access training program. Training materials were secured from the Northwest Regional Educational Laboratory. These materials were used in the second year with the eight regional facilitators. The result was unsatisfactory. The facilitators felt that they were not change agents in the terms set out in the materials and the project staff felt uncomfortable promoting a concept in which they, themselves, were not regularly engaged. Consequently, the linkage training sessions which the project held in the third, fourth, and fifth years dealt exclusively with the query negotiation process between user and provider and the mechanics of accessing the project's resources. It was a disappointment to the project that the aspects of linkage which depended upon remote, on-line access to MER were not realized.

The project did, on the other hand, open the knowledge resources of a wide variety of specialized networks to the general user. These included the programs listed above under information resources available through the project.

In addition to the objectives for linkage, a time line was established and subsequently modified and revised for the implementation of linkage at the state, Regional Educational Media Center, intermediate, and local dissemination unit levels. The project's strategy was to work with and phase in disseminators from the top of the network's organizational hierarchy down as a way of

assuring that the Department would be prepared to meet Regional Educational Media Centers' needs, these Centers would meet intermediate units' needs, and intermediates would meet local units' needs.

The state level was targeted for year I. the Department's major programs agreed to join the network. The twenty-to Regional Educational Media Centers were targeted and included in year II as were the fifty-eight intermediate school districts. The 537 local dissemination units in school districts were scheduled for year III and rescheduled for year IV, then year V. During year V the project decided not to bring local dissemination units into the network directly. The intermediates and Regional Educational Media Centers would be the local units' entry point into the project's network. Direct linkage would extend from the Department to regional and intermediate units. Linkage would be indirect from the project to the local units. Two factors led to this decision. The project staff did not feel capable of working with 537 separate local units. Although requests from local units had always been accepted and addressed, staff felt that direct solicitation would overwhelm their capacity and cause an unacceptable degradation of service to intermediate units, Regional Educational Media Centers, and Department program staff. Secondly, the intermediates and regionals were organizationally constituted to address local units' needs. The better role for the project would be to support the intermediates and regionals rather than substitute for them.

The project's linkage activities included formal presentations, technical assistance, and general responses via telephone, mail, telecopier, and informal person-to-person meetings. Formal presentations were made at conferences, workshops, and seminars organized by specialized and general dissemination units and professional organizations. Statistics on formal presentations and

technical assistance are available for the second through fifth project years, the period in which linkage beyond the Department was undertaken. Table IV presents these data.

Throughout the four years, the project made most of its presentations, i.e., forty of seventy-four, or fifty-four percent, to Department staff with the largest number, twenty-nine, taking place in year II, the first fully staffed operating year of the project. Over the course of years II through V, the project made the most presentations in year II, followed by years IV, V, and III in that order.

The other type of recorded linkage activity was technical assistance. These efforts included: (1) technical assistance in data base development, (2) training and technical assistance in developing specialized bibliographies, (3) training in data base utilization, (4) training in information search techniques, (5) training in the use of microcomputer hardware and software, (6) establishment, maintenance, and updating of specialized information banks and automated data bases, (7) national and Michigan data base and reference material searches, (8) information and assistance request referrals to other Department of Education units and units in other state, regional, and intermediate agencies, (9) instruction in using the telecopier network, (10) clarifying users' questions to identify searchable topics and appropriate on-line, off-line, and manual data bases, (11) promoting the use of knowledge resources with their clients, and (12) communicating with the directors of other specialized and generalized dissemination units.

Project staff made a total of 184 technical assistance visits over the four reported project years. Of these, thirty-eight percent occurred in the first year, forty percent in the second, and thirteen percent and ten percent

TABLE IV  
PROJECT LINKAGE ACTIVITIES<sup>1</sup>  
Project Years II - V: October - March

|                                    | Technical Assistance |          |         |        | Formal Presentations |          |         |        |
|------------------------------------|----------------------|----------|---------|--------|----------------------|----------|---------|--------|
|                                    | Year II              | Year III | Year IV | Year V | Year II              | Year III | Year IV | Year V |
| State Education Agency             | 62                   | 54       | 19      | 6      | 29                   | 6        | 5       | 0      |
| Regional/ISD                       | 3                    | 13       | 0       | 1      | 7                    | 1        | 2       | 0      |
| Local District                     | 4                    | 2        | 0       | 0      | 0                    | 0        | 2       | 1      |
| State Agencies<br>Other than Educ. | 0                    | 0        | 2       | 4      | 0                    | 0        | 0       | 3      |
| Other States                       | 0                    | 3        | 0       | 0      | 0                    | 0        | 0       | 0      |
| Institutions &<br>Associations     | 0                    | 0        | 0       | 6      | 0                    | 1        | 3       | 4      |
| Colleges &<br>Universities         | 0                    | 1        | 2       | 1      | 0                    | 0        | 3       | 2      |
| Libraries                          | 0                    | 0        | 0       | 0      | 0                    | 0        | 1       | 1      |
| Individuals                        | 0                    | 1        | 0       | 0      | 0                    | 0        | 3       | 0      |
| Total                              | 69                   | 74       | 23      | 18     | 36                   | 8        | 19      | 11     |

<sup>1</sup>All data are drawn from annual project proposals/reports previously submitted to the National Institute of Education; except Year V data which are first presented here.

respectively in the fourth and fifth years. The largest recipient of technical assistance was Department staff, who accounted for seventy-seven percent of all technical assistance recipients. This early, heavy targeting of linkage activity reflects the project's intention to establish communication and shared services at the top of the specialized dissemination networks and the need at that level to work on a one-to-one basis. The relatively fewer activities at the Regional Educational Media Center and intermediate unit levels is accounted for by presentations in group settings.

## Leadership

This section on Leadership consists of three parts. The first deals with the organizational context within the Michigan Department of Education into which the dissemination capacity building project was placed. The location of the project and the separation of administration of the project grant from operational control is examined. The second part describes the individuals who managed the project and describes the effect of an eleven and one-half month period during which the project was without a manager. The third part analyzes the changing staffing levels during the five years the project was federally funded and discusses possible relationships between these levels and project activity and accomplishment.

## Organizational Context

The Department was unable to initiate formal project activities until the fall of 1977 due to the Legislature's federal funds reappropriation procedures. During this period, general administration of the project was assigned to the planning office with personnel supervision and management of operations assigned to the State Library. Planning office oversight and communication with the National Institute of Education was intended to enhance coordination for the project within the Department. Since the planning office was part of the Superintendent's office, it was also anticipated that the project would gain departmental visibility and have direct access to the Superintendent. This access and visibility were counted on to gain the Superintendent's support for the project and enhance its potential for future institutionalization. The project manager also gained a great degree of organizational autonomy and freedom of access across the Department by being associated with and having a

desk physically located in the planning unit. Department administrators were accustomed to meeting with the planning director on cross Department issues and accepted the project manager in the same light. Had the manager been identified solely with the Library, entry to the Department's administrative offices would have been far slower and much less productive. The manager as well as administrative staff often commented on this point.

At the same time, the planning office's relationship to the project was questioned by the Library administrators. The arrangement seemed to place final authority for the project in the planning office and day-to-day responsibility for the project with the Library. Since the planning office was primarily a staff function of the Superintendent's office and was generally thought not to have line responsibility, this quasi-administrative relationship was a cause for concern. The arrangement seemed to omit a role in the project for the Library administrators. In the extreme, the planning office appeared to be usurping these administrator's authority and a portion of their operation. The strategy of establishing planning office responsibility for coordination and policy development thus caused administrative concern from the project's inception. Coordination, however, was given priority by the Superintendent and the planning office maintained its role.

In retrospect, the planning office's effect during the period of the federally funded life of the project's operations is difficult to single out. The project began as a service function within the State Library. The project responded to educator's information questions with packages of references and materials. This function was relatively similar to the Library's general reference service but different in that it catered only to educators, made use of education-related information resources, and had a responsibility for

enhancing its resources, the size of its user group, and the methods of its operation. It was also different in that its staff although physically located in the State Library were funded separately under a special project.

Another difference, and one that most distinguished it from other Library activities, was the project's active pursuit of dissemination work from programs within the Department. The project's manager met repeatedly with program staff throughout the Department offering to hold, organize, annotate, and disseminate their materials in return for access to and use of these materials by the project for its educator user group. This approach initiated the development of the project's unique resource base and several programs' dependence on the project for their dissemination efforts. Bilingual Education, Migrant Education, and Sex Equity were such early project clients.

Further, unlike federal categorical programs, the project was not a grant-making activity. As a service provider, control of funding authority was not an issue. This diminished the problematic nature of the planning office's involvement. Had grants administration been involved, organizational boundaries would have been of greater concern. The planning office was responsible for policy development and federal liaison but not general administration or personnel supervision. These were Library responsibilities. At the outset, the Library contributed to the project's material and personnel support but treated it as a separate entity that made use of its resources.

#### Management

The project's first full year of operation officially began on September 1, 1977 and concluded on August 31, 1978. Dr. Alida Geppert was hired as manager on September 6, 1977. Dr. Geppert was active as project manager and responsible for implementing the project's plans from September, 1977 through

January, 1980.

Dr. Geppert's primary focus was to build two-way service relationships between the project and subject-specific Department of Education programs which were at the head of specialized dissemination networks. Her efforts resulted in the Sex Equity Program, Gifted and Talented, and Education Information Center (adult, unemployed clients) contributing staff time to the project. Migrant Education, Bilingual Education, National Diffusion Network, Experimental and Demonstrations Centers Program (ESEA IVC), Sex Equity, Food and Nutrition, Project CEDISS (the research and development utilization project funded by the National Institute of Education in the Department), and Professional Development used the project as a major dissemination medium for their specialized dissemination networks. The project responded to these programs' users as the dissemination unit of these programs.

Dr. Geppert's other major focus was the establishment of communication channels among the Regional Educational Media Centers, intermediate school districts, and the Department. Ten of the Regional Educational Media Center directors agreed to serve as linkage agents and were called "regional facilitators". They served as a second level leadership cadre to promote the use of the knowledge resources which the project could provide. The directors also served in a proactive educational improvement role in the state's National Diffusion Network. The project provided the resource base for the Network's state facilitator providing searches of Network products and human resources who could provide training and technical assistance to potential product adopters. The regional facilitators used the telecopier system and in-WATS lines to communicate their needs to project staff directly. The project regularly reported facilitator inquiries to the Network's state facilitator. Channels

such as those with the regional facilitators enabled and promoted the routing and flow of information requests and responses according to the project's plan for linking existing specialized dissemination networks operated by subject-specific programs through the project's generalized dissemination network.

Dr. Geppert resigned from the Department on February 1, 1980 to assume the directorship of a regional library consortium covering much of the southwestern corner of Michigan. Dr. Geppert carried forward the concept of building service capacity through linkage to the consortium. From February 1, 1980 to January 15, 1981 the project was without a manager. This period included the last seven months of project year III and the first four and one-half months of year IV. During this period, the project continued to serve departmental programs and take on additional responsibilities such as development of the statewide human resource file for Professional Development within the Michigan data base.

The project's planned year III and IV outreach to local school districts, as well as its expansion of channels with Regional Educational Media Centers and intermediate school districts were interrupted until a new manager could be hired. The Governor has ordered a freeze on all hiring for new positions or replacements whether federally or state funded for fiscal year 1980 to 1981 (October 1, 1980 through September 30, 1981). The freeze was partially lifted in the fall to permit certain transfers among existing state staff. An individual was hired in December, 1980 as manager. At the same time the Governor released an executive order which required layoffs of employees throughout state government. Because Civil Service rules required the use of a bumping procedure in implementing reductions in force, the new project manager was bumped to a lower position in another program by an individual with more years

of service at the manager's classification. This new manager had headed the State Library's reference unit for twelve and one-half years and supervised a staff of twelve professional librarians, three clerks, and twelve part-time student assistants. He had been responsible for coordinating the selection and maintenance of a collection of over one million items. The State Library's reference function for state employees and the general public was dissolved on January 15, 1981 and its head, Mr. James Michelsen, assumed the duties of project manager.

The eleven and one-half month hiatus in active outreach and the change in project management required the project to be reintroduced to departmental programs, to Regional Educational Media Center directors, and to intermediate school district information service staff. The new manager's style was more formal than his predecessor's and depended upon meetings with departmental program supervisors conducted as interviews. He also attended and participated in meetings held by Regional Center directors and intermediate unit information staff. Through these meetings Mr. Michelsen defined the role of the project as a source of information for the programs and for the programs' clients. With Regional Center directors and intermediate unit information staff, Mr. Michelsen stressed the request routing role the project could play as well as the provision of Michigan information base searches, searches of national on-line data bases, and manual searches of the Library's print and media resources. In the educational system Mr. Michelsen limited project outreach to Regional Educational Media Centers and intermediate school districts and did not extend the project's direct user services to local school districts. Although local districts were not prohibited from access, they were not actively solicited. Mr. Michelsen cast the project as a service to state

government and to professional information providers, not to end users in school districts.

Mr. Michelsen began to pursue other state agencies as clients and as users of the project. His work with other agencies focused on incorporating their information resources in the project's Michigan data base. These agencies became clients of the project by depending upon it for search and retrieval of their own information resources. He also emphasized responding to their information requests with off-line and on-line information base searches which would make the agencies members of the project's direct user group.

During this period of reintroduction (project years III and IV), the quantity of searches the project performed for Regional Educational Media Centers and intermediate school districts declined by fifty-seven percent. Searches for local districts declined by thirty-six percent. Searches performed for the State Library declined by forty-six percent and by twenty percent for the remainder of the Department of Education. In contrast to these reductions, the number of searches conducted for other state agencies rose by ninety percent. This increase also made up for the declines in all other user categories.

It appears that Mr. Michelsen's past experience in the reference unit and his early contacts with other state agencies resulted in the increases in searches performed for them. This was an essentially new user population for the project. It would also appear that the decreases in all other categories are attributable to the nearly twelve month break in leadership. In the following year, the total number of on-line searches dropped by forty-two percent. The increase in state agency service in year IV was more than eradicated by an eighty-three percent decrease. The only category which increased was local

school districts. Project staff had not solicited direct requests from this group so a possible explanation must be looked for elsewhere. Two factors may be reflected in this increase. The Department's Health Education program began to use the project as the medium through which the state's health education specialists and teachers would identify approved human and material resources. The Department's Professional Development program used the project as its source of human resources for the selection of the state's professional development councils. This increase in local districts' use of the project may, therefore, be attributed to the project's execution of the dissemination function for these two programs and to the required use of the project's data base for school districts' compliance with program requirements.

#### Levels of Staffing

The project's staff levels varied over the course of the project's five funded years in terms of the individuals involved, the number of individuals involved, and the focus of their efforts. The effect of the change in managers was dealt with above. This section deals with the access and linkage specialist and the information and resource specialists who supported her work.

As noted under the section dealing with information resources, searching, data base input, and maintenance of the data base were extremely labor intensive. Data base searches entailed project staff preparing written search instructions and sending them by inter-department mail to the Department's data processing center. Although turn around was usually overnight, preparation of search instructions, review of output regarding adequacy of the selected search strategy, and possible additional searches took exorbitant amounts of staff time. Data base input included acquiring new products and programs or their

descriptions, reviewing or obtaining a review of their content for appropriateness, preparing abstracts, submitting the abstracts to the data center for data base input, and reviewing output for accuracy. Input of human resources via curriculum vitae also followed this procedure. Data base maintenance included adding and deleting information on the abstracts to keep them current. Individual program abstracts were updated only when new information was provided by the specialized network. Product abstracts were purged and reentered every two years. Human resource abstracts were purged and reentered every year.

The time of the resource and information specialists was allocated to on-line searches, off-line searches, manual searches, data base input and maintenance. The access and linkage specialist coordinated this process, dealt with clients and users within and outside the Department regarding the Michigan data base, made presentations on the project and data base at educational conferences and workshops, and provided technical assistance to the projects information service clients within and outside the Department. The manager identified and developed the project's clientele and users, supervised the staff, prepared budgets and funding proposals, promoted the project within and outside the Department, represented the project at state and national library, media, and information science meetings, and maintained personal contact with the directors of the other units in the network of general dissemination units and the directors of the units in the specialized dissemination networks. The eleven month break in the manager's position required the access and linkage specialist to assume external communication and network maintenance functions and devote less time to data base activities.

Table V presents the absolute and relative levels of effort of project staff over the federally funded life of the project. The off-line and manual

TABLE V  
COMPARATIVE LEVELS OF EFFORT

Project Years I - V

|                                | <u>Year I</u> | <u>Year II</u> | <u>Year III</u>  | <u>Year IV</u>   | <u>Year V</u> | <u>Total</u> | <u>Percentage of<br/>5 Year FTE</u> |
|--------------------------------|---------------|----------------|------------------|------------------|---------------|--------------|-------------------------------------|
| Director                       | .2            | .2             | .1               | .18              | .05           | .73          | 3%                                  |
| Manager                        | 1.0           | 1.0            | .31 <sup>1</sup> | .34 <sup>2</sup> | .67           | 4.17         | 19%                                 |
| Access & Linkage<br>Specialist | 1.0           | 1.0            | .75              | 1.0              | 1.0           | 4.75         | 21%                                 |
| Resource Specialist            | 1.0           | 1.0            | .75              | .75              | -             | 3.50         | 16%                                 |
| Information Specialist         | .5            | .5             | .5               | .5               | -             | 2.0          | 9%                                  |
| Information Specialist         | .5            | .5             | .5               | .5               | -             | 2.0          | 20%                                 |
| Secretary                      | 1.0           | 1.0            | .75              | .75              | 1.0           | 4.5          | 20%                                 |
| Student Assistant              | .5            | -              | .25              | -                | -             | .75          | 3%                                  |
| Total                          | 5.7           | 5.2            | 4.35             | 4.43             | 2.72          | 22.4         |                                     |
| Percentage of 5 Year<br>FTE    | 25%           | 23%            | 19%              | 20%              | 12%           |              | 100%                                |

<sup>1</sup>Due to manager's resignation 2/1/80

<sup>2</sup>Hiring freeze delayed hiring new manager until 1/15/81

search totals declined by twenty-seven percent during year III while on-line searches declined by only three percent. This would be expected since the off-line and manual searches are more labor intensive. A more significant change was the sixty-nine percent decline in instances of technical assistance from seventy-four to twenty-three. The manager had been the principal agent for technical assistance. The number of formal presentations increased by 138 percent from eight to nineteen, which seems to indicate a substitution of the presentation format for technical assistance--in part due to the different styles and backgrounds of the access and linkage specialist and the former manager.

In year IV, the loss of the three quarter-time resource specialist and the two half-time information specialists had a profound impact on the project's service capacity. The number of off-line and manual searches declined by eighty-four percent from 411 to sixty-five. The number of on-line searches declined by forty-two percent from 1023 to 591. Technical assistance activities dropped by twenty-two percent from twenty-three to eighteen. The number of presentations dropped by forty-two percent from nineteen to eleven. These large decreases were a direct result of the decrease in staff. The input of new abstracts and updating of existing abstracts had to be carried out by the access and linkage specialist. During year V, 754 new abstracts were prepared and 3199 abstracts were updated. The input of new abstracts was largely due to the use of the data base as the source of human resources by the Health Education Program and the Professional Development program. The combination of decreased staff and increased data base input demands are considered to be the primary cause in the reduction of searches completed by the project in year V.

Overall, the changes in staffing levels, break in leadership, changes in

management style, and shifts in the allocation of staff to the several project functions were reflected in the levels of searches, assistance, and presentations across the project's five federally funded years.

### Institutionalization

This section discusses the incorporation of the Michigan Dissemination Capacity Building Project into the organization of the Department of Education. It begins with the first conceptualization of what institutionalization would entail as presented in the year I proposal and ends with institutionalization of the project in an agency which the Legislature transferred out of the Department and which now has quasi-independent status under the Legislature itself. The implications of this transfer for the future of the project's functions are also discussed.

The institutionalization of the project had, beginning with the year I proposal, been conceived as the incorporation of the project's functions into the routine operations of the Department. Michigan's economic decline was not anticipated. The resulting rejection by the Governor of departmental requests for new state funds and the in-year reductions of state operating budgets in 1981 and 1982 forced the Department to look to other sources to continue the project. The loss of three project staff in year V reflected this problem. However, in 1982 the State Library Director transferred the manager, access and linkage specialist, and the project secretary to other federal funds and committed the Library to continued support for the project's activities.

On the last night of their 1982 session, the Sate Legislature passed tie-barred companion bills for continued state aid to public libraries and the transfer of the State Library out of the Department of Education to the Legislature's service bureau. The latter bill had been debated for more than a year and had appeared to have been put aside. The Governor who had been opposed to the transfer on the grounds of unconsitutional infringement by the legislative branch of executive branch authority had not run for reelection. The two

library bills were among several that did not reach his desk before he left office. The new Governor did not oppose the bills. Instead he signed them and asked the Attorney General for an opinion on the transfer's constitutionality. The Attorney General responded that he saw no constitutional issue involved. On June 6, 1983 the State Library put a new sign on its front lawn and changed its title to the Library of Michigan.

During the early spring of 1983, the project's former director called a meeting of the project's manager, access and linkage specialist, and the approximately fifteen program staff who were then receiving dissemination support from the project. The meeting's purpose was to clarify the project's intentions regarding dissemination service to the programs, maintenance of the Michigan data base, on-line, off-line, and manual search services to Regional Educational Media Centers, intermediate school districts, and local districts, updating and circulation of the statewide educational meeting and conference calendar, payments for the on-line data bases, and upkeep and improvement of the microcomputer center. The project's manager assured those present that all services would be maintained and that the Library was committed to serving educators. A proviso was introduced that after the transfer the Library as an agency would necessarily devote more resources to legislative reference and research and would also actively seek out and attempt to meet the service needs of all nineteen departments of state government. The manager pointed out that the Michigan data base would be expanded to include resource abstracts from other agencies and that the microcomputer center would be expanded to include hardware and software useful to government technicians and managers as well as educators. Since the transfer, the project has undergone a name change. It is now the Information Technology unit. It has continued its former services to

the Department and has used them as models of service it can offer to other departments of state government. A factor that favors continued service to the Department and educators throughout the state is that the Michigan data base is financially and operationally supported by the Department and will continue to be until at least September 30, 1984.

The project identified four objectives for the fifth year which dealt with insitutionalization. These objectives are listed and work with regard to them is reported in the Appendix to this report. In summary, efforts on behalf of the four objectives resulted in:

1. The project's microcomputer center was expanded to include hardware and software to assist instruction and for management of instruction, schools, and libraries.

2. Civil Service, Public Health, Social Services, and Eastern Michigan University's Center for Comprehensive Arts Planning became project clients.

3. Staff in the Departments of Social Services, Natural Resources, Transportation, Agriculture, and Mental Health became users of the Michigan data base.

4. The project staff determined that local school districts would continue to be served as secondary clients through Regional Educational Media Centers and intermediate school districts rather than be solicited as direct end users.

Activities carried out with regard to these four areas are listed under the corresponding objectives in the Appendix.

### Equity

This section describes the Michigan Dissemination Capacity Building Project's approach to equity and presents data on the distribution of materials in support of it.

The project defined equity as equality of access to knowledge resources. The project depended upon existing specialized dissemination networks to identify the information needs of protected groups and women and if the networks could not meet the needs, they would draw upon the resources of the project. Outreach and technical assistance in utilizing information was the responsibility of the specialized dissemination network. The project, however, dedicated itself to providing as much staff and technical support to these networks as it could to enable them to effect outreach and technical assistance. The practical result was that project staff developed numerous publications and other documents for these networks. The project also took on the mailing and workshop distribution of many of the materials, absorbing the costs itself.

Table VI lists the materials which the project developed or distributed, or both. The data on volume was kept beginning in July 1981 for the materials dealing with sex equity. The counts reflect the combined distribution of the project and the sex equity office. There are no data on the numbers of materials distributed under the gifted and talented, bilingual, and migrant education headings.

TABLE VI

## PRODUCTION AND DISTRIBUTION OF EQUITY MATERIALS 1981-83

| <u>Materials</u>                                                                                                                             | <u>Quantity</u> |
|----------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| <u>Produced and Disseminated by the Project</u>                                                                                              |                 |
| Sex Equity in Education: An Annotated Bibliography,<br>Bias Free Curriculum K-12                                                             | 1543            |
| Annotated Listing of Materials on Gifted and Talented<br>Education Available at the State Library                                            | N/A             |
| Five Bilingual Bibliographies: One on A-V Materials<br>at the State Library and the other four on non-<br>English books at the State Library | N/A             |
| Least Restrictive Environment, Michigan Rehabilitation Services                                                                              | N/A             |
| <u>Disseminated by Project</u>                                                                                                               |                 |
| Guidelines for Eliminating and Preventing Sex Discrimination                                                                                 | 2662            |
| A Student Guide to Title IX                                                                                                                  | 4339            |
| A Parent Guide to Title IX                                                                                                                   | 2765            |
| Athletic Scholarships for Women in Michigan Colleges and<br>Universities                                                                     | 517             |
| Susan B. Anthony Birthday Celebration Kit                                                                                                    | 527             |
| Bias Review Procedure                                                                                                                        | 557             |
| They Chose Greatness: Women Who Shaped America and<br>the World                                                                              | 2114            |
| Making it Work: A Booklet of Activities to Encourage<br>the Development of Coed Physical Education Programs                                  | 316             |
| A Report on a Review of Michigan School District<br>Compliance with Title IX                                                                 | 119             |
| Title IX Compliance: Using the MBO Approach                                                                                                  | 493             |
| Selected Bibliography of Non-Sexist Fiction, Preschool<br>Through Sixth Grade                                                                | 666             |
| Selected Bibliography of Non-Sexist Fiction, Seventh<br>Through Twelfth Grades                                                               | 1016            |

### Impact

The impact of the Michigan Dissemination Capacity Building Project's activities over the five years of its federally funded operation is discussed in this section. A definition of impact is provided and discussed in terms of the project's capacity to capture impact data. Examples of areas in which the project had positive impact are given.

Impact is defined as a change in behavior, attitude, or environment. In the project's educational context, change is considered positive when it improves an individual or organization's ability to meet its objectives and when the objectives increase educational opportunity or accomplishment, or both. Given the project's indirect relationship to the end users of its knowledge resources, the project could not take credit or blame for the user's accomplishments. The project did not attempt to collect data from end users for this reason. The project's relationship with the specialized dissemination networks was direct and the impact on these clients was measured by the quantity of their search requests. Statistics on searches are presented in prior sections. The steady rise then precipitous fall in activity are assumed to relate to the increase of project capacity and credibility then loss in ability to meet demand. There are, however, no data available on the number of unfilled search requests to verify the assertion that had additional staff been available the decline in searches performed would have been less steep.

A third area of impact is the use made of the project by specialized dissemination units to fulfill, in whole or in part, their dissemination responsibilities. From the project's first year, a variety of programs within the Department and insitutions have used the project in this way. Their accep-

tance of the project as a reliable and effective mechanism for the dissemination of their materials attests to the project's positive impact on their behavior. Programs in the Department have included:

(1) Bilingual Education which placed its entire library at the project's location so that the project could respond to educator's questions regarding Bilingual education;

(2) Migrant Education which depended upon the project to distribute its bibliographies and other materials;

(3) Sex Equity which used the project to develop and distribute numerous workshop and general application materials;

(4) Professional Development for which the project developed human and program resource files in the Michigan data base and to which the program directed its clients as the primary source of knowledge and human resources;

(5) the Department's research and development utilization project which used the project exclusively to respond to site's requests for career education products and human resources as well as to showcase career education products;

(6) Preprimary and Family education which brought day care institutions and Department of Social Service resources into the Michigan data base and used the project as a central referral source for its client organizations;

(7) the Michigan Educational Assessment Program which as part of its interpretive workshops used the project as a source of product, document, and human resource information for local educators investigating ways to use assessment scores as needs indicators in a problem-solving activity;

(8) Compensatory Education (now administering ECIA Chapter 1 and the state compensatory aid program) which used the project as its first reference for local school clients to identify school improvement resources;

(9) The Gifted and Talented program which established a formal relationship for dissemination with the project in its federal funding proposal and supported staff in the project to carry out its dissemination work;

(10) Special Education which through a special arrangement enabled the project to provide free search service to educators with the NIMIS data bases from the National Information Center for Special Education Materials;

(11) the Experimental and Demonstration Centers program which used the Michigan data base as the dissemination reference for its human and product resources in the Michigan Adoption Program and supported the project's publication of a special issue of its statewide newsletter;

(12) Michigan Rehabilitation Services which had two of its staff trained by the project to access the Michigan data base as well as on-line data bases;

(13) The Arts in Education program which used the project to disseminate its curriculum resources throughout the state and to maintain a dissemination service for its clients in local and intermediate school districts;

(14) The Social Studies, Mathematics, and Science programs which placed their curriculum resources in the Michigan data base and relied on the project to respond to their clients' requests for knowledge resources; and

(15) The National Diffusion Network statewide facilitator's entry of the Network's products into the Michigan data base and use of the project as its search and retrieval activity.

Support for activities in agencies and institutions outside the Department have included:

(1) Entry of the resources held by the Center for Comprehensive Art Education at Eastern Michigan University into the Michigan data base and use of the project by the center as its search and retrieval activity;

(2) Technical assistance to the Department of Civil Service to develop their own data base along the lines of the project's Michigan data base;

(3) Entry of products from the Institute for Research on Teaching at Michigan State University into the Michigan data base and referral of local educator requests for information to the project; and

(4) Technical assistance to the Education Information Center pilot test of the Michigan Occupational Information System with unemployed adults and use of the project as the primary educational resource for the pilot test.

This fourth example of project assistance has resulted in additional assistance requests from Michigan Rehabilitation Services and the Department of Social Services for expansion of the pilot in their field offices. The pilot test put existing separate information resources and communication technologies together in such a way that unemployed adults would find relevant and motivating.

A model was developed by the project manager and the MOIS staff which made use of a microcomputer to assist the individual to select career opportunities which matched his or her background and interest profile. The model used a microfiche reader to present extensive information about career and educational requirements and a counselor with a microfiche reader to access local job and educational opportunities. The microcomputer presented the individual with immediate, personalized responses to queries. The microfiche reader made the rapid review of a large number of documents practical. The counselor's use of the microfiche permitted a quick scan of the actual job market and the preparation of a personalized plan for education and employment.

There was nothing new in the separate pieces of personal assistance, information, or hardware, but their combined application in a controlled situa-

situation had not been tried. The use of the occupational information system in its main frame computer format had been successful in high schools and community colleges. A printed and microfiche version had had mixed results with adults. The system's appropriateness for adults had been questioned. Evaluations of the pilot test of the system in seven sites supported the conclusion that the system was highly successful in terms of process, immediate client feedback, and follow-through.

The findings of the pilot test are displayed in Table VII. The spread of ages, participation of males and females, and variety of participant sources provided a broad spectrum for the seven pilot tests. The ninety percent overall completion and ninety-two percent completion with career education plans (next steps) was considered extremely favorable by the agencies involved. The fifty-four percent plan follow-through level (determined by telephone sample thirty days after the session) was also considered extremely favorable. As a consequence of this demonstration of the effectiveness of disseminating educational opportunity and occupational information to unemployed and underemployed adults General Motors and Ford Motor Company have piloted the system and are considering incorporating it into their routine personnel procedures.

The accomplishments of the fifth project year are reported in the Appendix to this report. The first section presents the status of the activities which continued from year to year. The second section presents the status of project work on four institutionalization objectives that were specific to the fifth year and which are discussed below under Institutionalization.

In summary, impact of the project is demonstrated for units within the Department and agencies and institutions outside the Department. Impact on end users is assumed but cannot be verified with objective data.

TABLE VII  
 MERIC/EIC PROJECT RESULTS

| Location        | Date         | Participants |        | Age   | Category          | Total<br>Completing | Completed<br>W/Plan | Completed<br>W/Appt.     | Average<br>Total<br>Time | % of Client<br>Sample<br>Following<br>Through With<br>Plan |
|-----------------|--------------|--------------|--------|-------|-------------------|---------------------|---------------------|--------------------------|--------------------------|------------------------------------------------------------|
|                 |              | Male         | Female |       |                   |                     |                     |                          |                          |                                                            |
| Battle Creek    | March 12     | 18           |        | -     | CETA              | 12                  | 14 <sup>3</sup>     | -                        | 91 min.                  | -                                                          |
| Harrison        | March 18, 19 | 24           | 11     | -     | GA                | 34                  | 34                  | 10                       | 74 min.                  | 75%                                                        |
| Haslett         | March 24     | 4            | 9      | -     | Adult Ed.         | 8                   | 2 <sup>4</sup>      | -                        | 67 min.                  | -                                                          |
| Muskegon        | April 1, 2   | 28           | 9      | 18-58 | CETA <sup>1</sup> | 37                  | 35                  | 20                       | 83 min.                  | 58%                                                        |
| 56 Grand Rapids | April 7, 8   | 33           | 13     | 18-52 | GA <sup>2</sup>   | 41                  | 33                  | 8                        | 77 min.                  | 62%                                                        |
| Coldwater       | April 21     | 9            | 18     | 21-54 | CETA              | 27                  | 27                  | 4                        | 89 min.                  | 50%                                                        |
| Romulus         | April 29, 30 | 15           | 10     | 19-64 | UAW               | 22                  | 22                  | -                        | 95 min.                  | 25%                                                        |
| TOTALS          |              | 202          |        | 18-64 |                   | 181<br>(90%)        | 167<br>(92%)        | 42 <sup>5</sup><br>(25%) | 82 min.                  | 54% <sup>5</sup>                                           |

<sup>1</sup>Appointments from Job Search Program and Opportunities Industrialization Centers under Department of Social Services

<sup>2</sup>Appointments from Job Search Program and Department of Social Services

<sup>3</sup>Clients at this site had previously arranged plans to follow

<sup>4</sup>Most of the clients were currently enrolled students

<sup>5</sup>Battle Creek and Haslett workshop sites have not been included in this figure (see footnotes 3 & 4)

#### Client Responsiveness

Client responsiveness is defined as use of the Michigan Dissemination Capacity Building Project's resources and the off-line Michian data base system by specialized dissemination networks. These uses are discussed in the preceeding section on Impact.

#### External Support

The Michigan Dissemination Capacity Building Project was supported from within the Department of Education and from institutions and organizations within and outside of state government. This support is described in the previous section dealing with Impact.

### Significant Learnings

This section discusses the Michigan Dissemination Capacity Building Project's original approach as a source directory for knowledge resources in existing dissemination networks in light of the project's actual implementation.

The situation in 1975-76 with regard to the accessibility of educational information and its dissemination was marked by the growth of quasi-autonomous dissemination activities sponsored by subject specific programs, such as, Career Education, Special Education, National Diffusion Network, and Migrant Education. It was also marked by the lack of a commonly accepted and adopted set of procedures which would enable teachers, specialists, and administrators to gain access to information held by these specialized networks but available only to these programs' designated user groups. Special Education teachers did not have routine access to Migrant Education information resources. Even though the materials may have been valuable to their work they were limited because they were not recognized as members of the education group that dealt primarily with children from migratory labor families. On a one-to-one basis, materials were not denied to educators outside the specialization, but cross-specialization dissemination was neither promoted nor advertised.

An additional facet of the situation was the increased availability via computer terminals of information bases consisting of citations, abstracts, and text. These information bases provided an enormous resource to the educators who were aware of them, recognized a use for their contents, and had access to them. The technology involved, was, however, becoming available in only the better equipped intermediate school districts. Regardless of awareness and motivation, educators generally did not have access to these new national

information utilities.

The Michigan Dissemination Capacity Building Project proposed to build on and supplement existing dissemination activities according to an approach that would place the state in a leadership role defined as meeting a greater variety and quantity of information needs of more educators than could the independent subject-specific state, Regional Educational Media Center, and intermediate school district information services and programs. The state would not create additional information bases or serve local educators directly. In the first year proposal the terms specialized and generalized networks were introduced to denote affiliations of individuals who, respectively, provided and received information within or across topical areas. The proposal's model contemplated a vertical core of generalized dissemination units reaching by organizational level from local school district media specialist or librarian to intermediate district information specialist to regional media specialist to state dissemination center and finally to national information services. Around this core were the specialized dissemination networks, each also reaching by organizational level from local district to the state education agency. The need to be addressed was the establishment of operating procedures that would automatically move requests for information and technical assistance from the initial recipient to the appropriate resource if the first contact was not fruitful. The project's role would be to establish and maintain these linkages.

The key support for this linkage role would be an inventory of sources of resources. The inventory was to have been a resource like the Yellow Pages referencing sources by common categories of function. Also like the Yellow Pages, the sources included were expected to be people who were able and

willing to respond to requests for information. This inventory was to be available first in printed form then in on-line computer form. Individuals at each level in the organizational hierarchy of dissemination units were to be trained in accessing the inventory and in working through information requests from teachers and administrators to clarify and correctly route them. New sources of information available through the specialized networks and the generalized network would be added routinely as would out-dated sources be purged. The inventory would be the physical link between educator and resource. The training would not only make the flow of information possible, but would also foster communication among network members. Linkage would be realized between educator and resource and among the resource providers themselves.

During the first year of the project, it became apparent to the manager and director that the concept of a routing mechanism akin to the Yellow Pages did not take into account the degree of specificity in both the query and the resource description needed to properly route the query to a resource source. The search format was to have had source or sources of knowledge resources listed according to categories of knowledge resources. The discrepancy between concept and application was that routing a user's question according to category of information simply transferred the query process to another individual who then would have to determine whether the information was available in his or her program. If the information needed, as interpreted, was not available, then the query would be rerouted according to the specialized network's staff's interpretation of the query and his or her interpretation of the inventory's categories. This rerouting would have defeated the purpose of the inventory to move queries efficiently from user to resource source.

The solution to the problem was to make the inventory itself the source of resources. Project staff thereby controlled the query interpretation and responded with abstracts and resources citations directly rather than shifting the process to the actual source of the resource. Only when the project's resources were exhausted, was the query passed on. In the end-of-project interview with the access and linkage specialist, Ms. Jansen indicated that from the beginning of the project her concept had been of a knowledge resource center which used data bases and other information resources to answer educators' requests that could not be met by local, intermediate, or regional agencies. Her concept embodied the original proposal's "last resort" aspect but substituted the more useable resource base approach for the proposal's conceptual inventory of sources of resources.

With the development of the Michigan data base, the project was in a position to offer the Department's programs a vehicle for making their information resources available to their clients on a request basis. This was typical of the trade arrangement the project's first manager worked out with the Department's programs. This significantly reduced the strain on the program's staff whose dissemination activities were generally confined to procedural materials and followed predetermined calendars.

Once the project incorporated abstracts of the materials available through a specialized network in its data base, project staff could search the base in response to the specialized network's client's request, identify potentially appropriate materials, and mail the package of abstracts to the network's client. The client could choose the materials of interest and request them directly from the program in the Department or other agency identified in the abstract. As human resources were added as a separate file to augment the

product and document files, the project took on a broker role between programs' clients and educators who could provide them with assistance. This benefit to the program was balanced by the benefit the project derived from being able to provide the same information resources to general dissemination network members.

The effect for the user was what the first year proposal had intended, an efficient linkage of general user and knowledge resources. The approach differed but the result was the same.

APPENDIX

## MERIC Year V Activities and Accomplishments

### MERIC Year V Activities

Complete local level MERIC linkage

Complete plans for local school district MERIC awareness presentations in conjunction with professional development and other departmental program dissemination activities.

Complete plans for regional workshops on MERIC linkage and access procedures.

Continue MERIC role in Education Information Center (EIC) effort to provide educational and employment information to unemployed adults.

Participate on departmental program task forces and advisory committees.

Complete negotiation with NIE on Year V continuation grant.

Conduct MERIC awareness sessions in cooperation with MDE programs' presentations.

Conduct local/regional training workshops on MERIC access and linkage procedures.

Distribute linkage and access awareness brochure to local school district staff.

### Accomplishments

MERIC awareness brochure was completed in late summer of 1981 and we began to distribute it that autumn at conferences such as MASCD (Michigan Association for Supervision and Curriculum Development). Since then several hundred copies of the brochure have been distributed individually and at training sessions and workshops and other meetings.

The Office of Professional Development in the Department is an active disseminator of MERIC awareness information. In April a letter (see attached) was sent to all 115 professional development coordinators in Michigan. The Department's Michigan Education Report, which is sent to all local school districts, included an article on MERIC also in the spring.

This activity placed on hold pending realization of objective to get MER online. This should occur in spring or summer, 1983.

Met with staff from Adult Education and Vocational Education to explore ways in which EIC-type activity might be continued. Met with Project LEARN staff and attended a one-day Career Planning Conference held at Lansing Community College.

Participation on departmental program task forces and advisory committees has included Project BEST state team, Instructional TV Referrent Group, Information Management Users Group, Management Information System Subcommittee.

Negotiation completed as scheduled.

MERIC exhibit and Micro Center demonstration took place at annual Professional Development coalition meeting in Lansing in May, 1982.

This activity placed on hold pending realization of objective to get MER online. This should occur in spring or summer, 1983

Distribution has taken place at conferences, meetings with REMC directors and at times of individual contact.

## MERIC Year V Activities and Accomplishments

### MERIC Year V Activities

Update MER human, document, and project files.

Maintain client service logs and review search topics and products for potential general distribution.

Distribute linkage and general awareness/descriptive materials.

Prepare quarterly report and unofficial financial report; distribute to NIE, dissemination/diffusion task force, and advisory panel.

Conduct advisory panel meeting.

Participate on advisory committees of external organizations, agencies, and institutions.

Identify and undertake cooperative and collaborative dissemination activities with departmental programs.

Respond to requests for information and technical assistance regarding development, operation, and administration of MERIC.

### Accomplishments

Proceeding as scheduled. Human resources portion of file, specifically, results in an annual update of 800 records.

Regular and continuous review of requests has resulted in the production of bibliographies generated in search fields where demand is heavy. The best and most recent example of this is Placement in the Least Restrictive Environment, a bibliography on mainstreaming much used by the special education community.

When completed Thesaurus of MERIC Descriptors will be distributed widely. When educators make initial contact with MERIC, awareness materials are provided.

Prepared and distributed routinely.

Dissemination Advisory Panel meetings were held in July and November, 1981 and again in February, 1982. At such times MERIC's network activities were reviewed.

During the year staff have participated in external organizations and activities such as Project LEARN (MSU), Educational Teleconference of Michigan (community colleges), Michigan Library Consortium Task Force on Technology Seminars, State-wide Automation Conference (libraries), Civil Service Committee on Information Exchange, and Public Health Education Network.

Best examples have been with Offices of Professional Development, Sex Equity, and Special Education. A Bilingual Education dissemination project is scheduled to begin.

Contact has been made with Civil Service Research Program staff. Several joint meetings have been held. Technical assistance has been provided.

## MERIC Year V Activities and Accomplishments

### MERIC Year V Activities

Request fiscal year 1983 data processing services.

Review regional/local training materials and techniques.

Review MERIC awareness session materials and techniques.

Review intra-departmental cooperative relationships, technical assistance activities, in-kind and cash resource contributions.

Review regional educational media center, supplemental center, and intermediate school district network service performance.

Review data processing center's MER search performance turn-around and quality.

### Accomplishments

Request submitted routinely and accepted.

Training is highly individualized and tailored to the particular group being provided. Canned training materials at this time have not seemed appropriate.

With each training session materials and techniques are reviewed regularly for effectiveness.

Periodic meetings with unit and program supervisors are held to review MERIC relationships and activities beneficial to service area.

Continuous service performance technique maintained to assure speed and accuracy of data transmission.

Meet with the manager of the Systems and Programming Unit and his assistant assigned to the MERIC database regularly to discuss general performance as well as feasibility of enhancements.

MERIC Year V

Institutionalization Objectives/Activities and Accomplishments

Institutionalization Objectives/Activities

Establish a center at which educators may become familiar with microcomputers and courseware as a source of instructional materials.

Define needs, locate and acquire space for center.

Develop cataloging system (derive from NWRL: Microsift).

Work with Legislature to pass courseware amendment to textbook depository act.

Acquire microcomputers and install in center.

Assist centers in REMCs and ISDs and local school districts to adopt MERIC courseware cataloging system.

Prepare technical assistance and display materials.

Incorporate user recommendations in refinement of and addition to center activities.

Promote use of center by Department staff through Institute for Staff Development.

Promote use of center by REMC and intermediate school district staff.

Accomplishments

An assessment was made, floor plan developed, and facilities for the Micro Center acquired in October, 1981.

Conferred with staff from NWRL and met with Tri-County Computing Consortium to develop and refine cataloging scheme based on MicroSIFT.

Amendment has disappeared in committee.

PET and Apple micros acquired. Loan agreements arranged with Radio Shack and Atari.

This activity has not taken place yet. We should begin the cataloging this fall if staff is available.

A brochure describing the center and its services is being planned.

A department-wide Microcomputer Resource Center Steering Committee has been organized and meets regularly to discuss the center's objectives and operation.

Promotion of center has taken place through scheduled visits by Department staff to center, awareness meetings with Department staff and through membership of the Microcomputer Resource Center Steering Committee.

Center has been publicized at REMC directors' meetings and at state-wide computer users gatherings as well as through individual contacts.

## MERIC Year V

### Institutionalization Objectives/Activities and Accomplishments

#### Institutionalization Objectives/Activities

Increase the number of programs in public agencies and institutions that use MERIC's computerized data bank as their clients' source of program-related information.

Develop a network of program officers in other state agencies who are potential users of MERIC's dissemination and technical assistance capacities.

Publicize extra-Department of Education activities among potential users.

5 Prepare an awareness flyer on MERIC dissemination assistance services for state government agencies and institutions.

Develop abstract descriptors and computer related software to accomodate other agencies' information resources.

Increase the use of MERIC by employees in other public agencies and branches of government to meet their professional information needs.

Prepare an awareness flyer on MERIC search services for state government agencies and institutions.

#### Accomplishments

Public Health, Civil Service, Eastern Michigan University Center for Comprehensive Arts Planning are some of the agencies and institutions that now use MER database. More extensive networking will be developed in coming months as overtures are made to Mental Health, Corrections, et al.

Publicity will accompany development through extra-departmental media as well as through COSAL (Council of State Agency Libraries).

General MERIC brochure distributed to state government agencies along with information on other databases pertinent to information needs. Staff held awareness meetings with individuals in Social Services, Natural Resources, Transportation, Agriculture and Mental Health, among others, to determine how MERIC might assist them in meeting their information needs.

Thesaurus of MERIC descriptors and identifiers has been developed. Other agencies will need to be made cognizant of and directed to certain additional specialized thesauri as well.

General MERIC brochure distributed to state government agencies along with information on other databases pertinent to information needs. Staff held awareness meetings with individuals in Social Services, Natural Resources, Transportation, Agriculture and Mental Health, among others, to determine how MERIC might assist them in meeting their information needs.

MERIC Year V

Institutionalization Objectives/Activities and Accomplishments

Institutionalization Objectives/Activities

Establish a recurring open-house for potential users located outside the Lansing area.

Tailor bibliographies and acquisition lists to the needs of state government agencies and institutions.

Determine the role MERIC should assume in relation to local educational agencies, intermediate school districts, and regional educational media centers.

Seek advice of Knowledge Utilization Advisory Panel on MERIC's local school district role within context of institutionalization.

Prepare procedures for overall MERIC-REMC-ISD-LEA dissemination and assistance operations.

Review MERIC's network activities with Advisory Panel.

Accomplishments

When potential users visit Lansing and State Library, tours and awareness sessions are provided.

One such bibliography on Women's Concerns is being developed presently.

The role was discussed particularly at February, 1982 meeting.

Procedures are modified as greater efficiency can be determined.

Dissemination Advisory Panel meetings were held in July and November, 1981 and again in February, 1982. At such times MERIC's network activities were reviewed.